MIKROTIK

NetMetal ax

The Mars rover of networking

Our toughest long-range outdoor access point – now with **Wi-Fi 6!**

ETH
PoE in 18-28 V

GIGABIT ETHERNET WITH PASSIVE POE-IN

SFP

2.5 GIGABIT SFP FOR FIBER CONNECTIVITY

USB

USB

IP66 rated:

protection from dust, powerful jets of water and nearly any environment!

MIKROTIK

PWR SFP ETH

Dual-core ARM CPU

NanoSIM slot

MiniPCIe – add your own... LoRa? LTE?

Our latest dual-band, dual-chain Wi-Fi 6 radio

Meet one of your most versatile companions: the **NetMetal ax** — a powerful long-range outdoor access point that thrives in any environment. Designed for extra durability, it can be installed almost anywhere with ease — you can **open and close the case with one hand**. The rated **IP66 protection** will keep the device safe from dust and powerful water jets - in damp attics and elevator shafts, bustling docks, or coastal tower structures. No terrain is too rough for the NetMetal ax — the Mars rover of networking!

It features a modern dual-core ARM CPU, Gigabit Ethernet and 2.5 Gigabit SFP for fiber connectivity, a USB port, and a free miniPCIe slot that allows further customization. You could, for example, add an LTE modem for a mobile internet backup — we've added a NanoSIM slot on the NetMetal! But there are other options, like adding a gateway for LoRa IoT setups, such as our R11e-LR8!

A **powerful dual-band, dual-chain Wi-Fi 6 radio** offers increased speed, stability, security, roaming, power management, and other features, compared to the previous wireless protocols. Two RP-SMA female connectors allow adding an antenna of your choice for distances up to 30 kilometers.*. If necessary, you can adapt the NetMetal ax for lower range use with such antennas as our HGO-antenna-OUT screw-on omni antenna unit. It provides 3.3 dBi gain for the 2.4 GHz band and 5.5-7.1 dBi gain for the 5 GHz band.

If you've read this far, here's a little bonus feature: we've kept the good old beeper for various alarms or creative outputs.

*It's important to note that while longer links are feasible, their reliability may vary. Additionally, the distance achievable greatly depends on the antenna selected for use.

● Specifications

Product code	L23UGSR-5HaxD2HaxD-NM
CPU	Dual-Core IPQ-5010 800 MHz
CPU architecture	ARM
Size of RAM	256 MB
RAM type	DDR3L
Storage	128 MB, NAND
Number of 1G Ethernet ports	1
Number of 2.5 Gbps SFP ports	1
MiniPCIe slots	1 (Only for LTE, LoRA cards)
USB port	1 USB 2.0 port type A*
SIM slot	1 NanoSIM
Antenna connector	RP-SMA female
Wireless interface model	IPQ-5010 (2.4 GHz), QCN-6102 (5 GHz)
Wireless	2.4 GHz 802.11b/g/n/ax dual-chain, 5 GHz 802.11a/n/ac/ax dual-chain
Dimensions	143 x 247 x 48 mm
Operating system	RouterOS v7, License level 4
Operating temparature	-40°C to +70°C

*USB Type-A and mini-PCIe slots share the USB line and cannot be used simultaneously.

● Powering

Number of DC inputs	2 (PoE-In, DC jack)
PoE-In input Voltage	18-28 V
DC jack input voltage	12-28 V
Power adapter nominal voltage	24 V
Power adapter nominal current	1.2 A
Max USB current	1.5 A
PoE-In	Passive PoE
Max power consumption without attachments	12 W
Max power consumption	25 W

● Certification & Approvals

Certification	CE, FCC, IC, IP66

● Included parts

24 V 1.2 A power adapter	Gigabit PoE injector	Metal ring	Mount set